

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :  
Tomohiro OKUMURA et al. : Attn: APPLICATION BRANCH  
Serial No. NEW : Docket No. 2001\_1089A  
Filed August 1, 2001 :

PLASMA PROCESSING METHOD AND  
APPARATUS THEREOF

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEE FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975.

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents,  
Washington, DC 20231

Sir:

**Prior to initial examination of the above-identified new patent application,  
kindly amend the application as follows:**

**IN THE CLAIMS:**

**Kindly amend claims 29 and 37 as follows:**

29.(Amended) A plasma processing apparatus as defined in claim 27, wherein  
the dielectric tube is disposed such that it covers an edge of a hole of the metal body or  
the facing electrode.

37.(Amended) A plasma processing apparatus as defined in claim 28, wherein  
the dielectric tube is disposed such that it covers an edge of a hole of the metal body or  
the facing electrode.

**REMARKS**

The present Preliminary Amendment is submitted to delete the multiple dependencies of claims 29 and 37, thereby placing such claims in condition for examination and reducing the required PTO filing fee.

Copies of the amended portion of the claims with changes marked therein is attached and entitled "*Version with Markings to Show Changes Made.*"

Respectfully submitted,

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Version with Markings to  
Show Changes Made

28. A plasma processing apparatus as defined in Claim 18, wherein the dielectric tube is protruded by 1 to 10mm from a surface of the metal body or the facing electrode.

29. (Amended) A plasma processing apparatus as defined in Claim

5 27 ~~or 28~~, wherein the dielectric tube is disposed such that it covers an edge of a hole of the metal body or the facing electrode.

30. A plasma processing apparatus as defined in Claim 18, wherein the hole of the dielectric tube is 0.2 to 2mm in diameter.

31. A plasma processing apparatus as defined in Claim 18, wherein the hole of the dielectric tube is 0.4 to 0.8mm in diameter.

32. A plasma processing apparatus as defined in Claim 18, wherein a frequency of high-frequency power applied to the plasma source, the substrate electrode or the facing electrode is 50MHz to 3GHz.

33. A plasma processing apparatus as defined in Claim 24, wherein the dielectric tube is a bolt screwed in a tap given to the metal body or the facing electrode.

34. A plasma processing apparatus as defined in Claim 24, wherein the dielectric tube has a spot facing for screwdriver or wrench on a side of an inner wall of the vacuum chamber for rotating and screwing the dielectric tube in the metal plate or the facing electrode.

35. A plasma processing apparatus as defined in Claim 24, wherein the dielectric tube is protruded by 0.5 to 20mm from a surface of the metal body or the facing electrode.

36. A plasma processing apparatus as defined in Claim 24, wherein the dielectric tube is protruded by 1 to 10mm from a surface of the metal body or the facing electrode.

37. (Amended) A plasma processing apparatus as defined in Claim <sup>28</sup><sub>1</sub> ~~27 or 28~~, wherein the dielectric tube is disposed such that it covers an edge of a hole of the metal body or the facing electrode.

38. A plasma processing apparatus as defined in Claim 24, wherein the hole of the dielectric tube is 0.2 to 2mm in diameter.

39. A plasma processing apparatus as defined in Claim 24, wherein the hole of the dielectric tube is 0.4 to 0.8mm in diameter.

40. A plasma processing apparatus as defined in Claim 24, wherein a frequency of high-frequency power applied to the plasma source, the substrate electrode or the facing electrode is 50MHz to 3GHz.